ORIGINAL

AIRTOUCH™
Communications
The new name for PacTel

Kathleen Q. Abernathy
Vice President
Federal Regulatory

AirTouch Communications
1818 N Street N.W.
Washington, DC 20036

Telephone: 202 293-4960
Facsimile: 202 293-4970

DOCKET FILE COPY ORIGINAL

RECEIVED
OCT 1 4 1994
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

[redacted]

October 14, 1994

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, NW, Room 222
Washington, DC 20554

Re: Reply Comments, Equal Access and Interconnection Rulemaking
(CC Docket No. 94-54)

Dear Mr. Caton:

On behalf of AirTouch Communications ("AirTouch"), attached hereto are revised copies of the Reply Comments filed yesterday in the above-referenced proceeding. These revised Reply Comments merely add the Table of Contents that was inadvertently missing from yesterday's copies and corrects the pagination. The copies that were served on parties yesterday included these corrections.

If you have any questions regarding this matter, please contact either David A. Gross at (202-293-4955) or me regarding this matter.

Respectively submitted,

Kathleen Q. Abernathy

Kathleen Q. Abernathy

Attachment

cc: All parties (w/o enclosure)

No. of Copies rec'd 0+7
List ABCDE

ORIGINAL

Before the
Federal Communications Commission

RECEIVED
OCT 14 1994
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of	)	
	)	
Equal Access and Interconnection	)	CC Docket No. 94-54
Obligations Pertaining to Commercial	)	RM - 8012
Mobile Radio Services	)	

[redacted]

DOCKET FILE COPY ORIGINAL

Reply Comments of AirTouch Communications

Pamela J. Riley
Director Public Policy

AirTouch Communications
425 Market Street
San Francisco, CA 94596
(415) 658-2058

Kathleen Abernathy
V.P. Federal Regulatory

David A. Gross
Washington Counsel

AirTouch Communications
1818 N Street, N.W.
Washington, D.C. 20554
(202) 293-3800

October 13, 1994

RECEIVED

OCT 1 4 1994

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Summary

The record in this proceeding supports imposition of a narrow definition of equal access for CMRS providers as defined by unblocked access to a customer's interexchange carrier ("IXC") of choice. Additional rules, including presubscription and default allocations, will simply limit consumer choices, result in higher long distance rates, and allow for less flexibility in the design of new services and coverage areas.

The record on the reseller switch issue demonstrates conclusively that the reseller switch proposal is simply an improper and misguided quest to impose ratebase, rate-of-return regulation on competitive cellular carriers. The interconnection obligations of cellular carriers are not the issue, because without the inherent inefficiencies of rate-of-return regulation, reseller switches are not economically viable. As the Commission has repeatedly recognized, the costs of such regulation -- pricing distortions, retention of inefficient technologies, delays in service introduction and reduced demand -- far outweigh the benefits in a competitive market. Additionally, the reseller switch proposal creates technical risks and inefficiencies, and undermines the benefits of facilities-based competition.

TABLE OF CONTENTS

Before the
Federal Communications Commission

RECEIVED

OCT 1 4 1994

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of	)	
	)	
Equal Access and Interconnection	)	CC Docket No. 94-54
Obligations Pertaining to Commercial	)	RM - 8012
Mobile Radio Services	)	

Reply Comments of AirTouch Communications

AirTouch is filing these Reply Comments to address the issues raised by parties in the above-captioned proceeding.

I. The Record Does Not Support the Commission's Proposed Extension of Presubscribed, 1+ Equal Access Obligations to Cellular Carriers

The Comments filed in response to Commission's proposed equal access policies support the conclusion that there should be no additional obligations imposed on CMRS providers. The great majority of parties filing comments oppose the high cost of presubscribed 1+ equal access implementation because it would result in higher prices, reduced competition, and minimal benefits to consumers.[1] In light of the vigorous competition in the CMRS industry today, these costs cannot be justified.[2]

1 See Comcast at 33; AllTel at 5; OneComm at 14-16; Americell at 8; Western Wireless Corp. at 2-6; Vanguard at 136; TDS at 3-7; SNET at 5-10; Small Market Cellular Operators 2-6; Point Communications at 2-4; Palmer Communications at 2-7; Nextel at 10; GTE at 2-19; CTIA at 4-15.

2 See SNET at 11; AirTouch at 6.

Equal access defined as unblocked access to any carrier best preserves consumer choice while avoiding inefficient regulatory burdens.[3] No evidence exists to support the IXCs' claims that 1+ interconnection is valued by CMRS consumers.[4] As correctly explained by GTE, "[i]f equal access were deemed beneficial by cellular customers, then RBOC cellular carriers would have dominated their market to the detriment of others such as GTE. That has not happened."[5]

Many of the Bell Companies oppose equal access policies but argue that since they are subject to the requirements of the AT&T consent decree, all CMRS providers should be similarly burdened.[6] These obligations were tied the BOCs' bottleneck facilities in their local exchange markets, and cannot be justified for wireless companies with no affiliation to a BOC.[7] As the Commission recently noted in approving the transfer of control of McCaw Cellular to AT&T:

> "The equal access requirements imposed on the BOCs by the MFJ and our rules at the time of the Bell System divestiture were intended to ensure that all IXCs would have the opportunity to obtain local access service equivalent to that provided to AT&T, thereby allowing consumers to choose among the available IXCs. . . .The record here does not raise the same concerns about competition and consumer choice."[8]

---

3 Parties not currently subject to equal access offer their customers access to their IXC of choice through 10XXX, 800, or 950 dial around arrangements. GTE at 7-9; SNET Mobility at 9; Miscellco at 8.

4 See, e.g., LDDS at 14; AT&T at 3.

5 GTE Comments at 6. See also Nextel Comments at 10; Union Telephone Co. Comments at 3; TDS Comments at 8.

6 See, e.g., SWB at 51; Pacific Bell at 5, BellSouth at 31-33. Bell Atlantic at 4-6; Ameritech at 1.

7 See, e.g., Nextel at 5-6, AirTouch at 9.

8 In re Application of McCaw and AT&T, File No. ENF-93-44, MO&O adopted September 19, 1994 at para. 68.

On similar parity principles, McCaw advocates the extension of the equal access burdens to everyone else because it volunteered to have such requirements imposed on it as a price for merging with AT&T, the dominant IXC in the U.S.[9] The unique characteristics of the AT&T/McCaw merger are not applicable to the cellular industry generally. Because cellular carriers apart from McCaw will have no market power in long distance, their freedom to buy bulk long distance services enhances long distance competition.[10]

II. Mandatory Interconnection of Reseller Switches Do Not Serve the Public Interest

A. There is No Legal Basis to Mandate the Physical Interconnections of Reseller-Derived Facilities.

NCRA and CSI argue that because resellers are CMRS providers with common carrier obligations to serve their customers in a nondiscriminatory fashion, interconnection obligations are limitless.[11] In support of their claim, the resellers point to the interconnection language of Section 332(c)(1)(B) which requires the Commission to order common carriers to interconnect with the physical facilities of CMRS providers upon reasonable request. Importantly, however, this Budget Act provision did not establish any new rights of cellular resellers to be interconnected with facilities-based cellular carriers. To the contrary, the Budget Act's modification of Section 332 explicitly states that, other than to require the Commission to respond to "reasonable" interconnection requests of CMRS providers, Section 332 "shall not be construed as a

9 McCaw at 31-32.

10 Comcast at 35; TDS at 13; National Telephone Cooperative Assoc. at 5.

11 NCRA at 8; CSI at 4.

limitation or expansion of the Commission's authority to order interconnection. . . "[12] NCRA's broad reading of the statutory language is thus inaccurate.[13]

Congress' intent was to facilitate the establishment of a seamless network of networks in which consumers on one system could reach consumers on any other system.[14] No where in Congress' determination is there any indication of an intent to elevate the status of bulk purchasers of airtime (i.e., resellers) to facilities-based carriers. Thus, the resellers' rights to interconnect are only triggered if the FCC first authorizes the proposed facilities. To make that determination, the Commission must find that the requested interconnection is reasonable and serves the public interest.[15] Because the interconnection obligations of the Budget Act do not confer any new rights to the resellers, the statutory deadlines regarding CMRS interconnection rules are also not applicable.[16]

---

12 Section 332(c)(1)(B) of the Communications Act.

13 NCRA argues that such an interpretation renders Section 332(c)(1)(B) as superfluous, i.e., if the Section does not expand the Commission's discretion under Section 201, then it has no purpose. NCRA Comments at 9. The purpose of the language "except to the extent that the Commission is required to respond to such a request" [of any person providing commercial mobile service] is to clarify that Section 201 applies to interconnection requests of CMRS providers, which while "treated as a common carriers" under Section 332(c)(1)(A), may not always be common carriers.

14 House Energy & Commerce Budget Reconciliation Committee Report at 29 ("The committee considers the right to interconnect an important one which the Commission shall seek to promote, since interconnection serves to enhance competition and advance a seamless national network.")

15 Section 210(a) of the Communications Act provides: "It shall be the duty of every common carrier. . . where the Commission, after opportunity for hearing, finds such action <u>necessary or desirable in the public interest</u>, to establish physical connection with other carriers." Section 332(c)(1)(B) requires: "Upon <u>reasonable</u> request of any person providing commercial mobile service, the Commission shall order a common carrier to establish physical connections with such service pursuant to the provision of section 210 of this Act." (Emphasis added.)

16 NCRA Comments at 4; CSI Comments at 5.

CSI further argues (in its attached Petition for Reconsideration filed with the FCC September 12) that FCC policies requiring comparable charges for resellers and facilities-based carriers support mandatory interconnection of reseller switches.[17] Contrary to CSI's assertions, cases mandating that resellers pay the same tariffed rates as facilities-based carriers are not relevant to the Commission's determination here. The Commission's Cellular Resale Policies have consistently focused on only the benefits of nondiscriminatory access to airtime, not interconnection of facilities.[18] To the contrary, the Commission has acknowledged that such issues raise important problems, including the ability of competitors to obtain competitively sensitive information and the anti-competitive impact of allowing competitors to piggy-back off other competitors' investments when it limits the resale requirements for facilities-based cellular competitors.[19]

In addition, the Commission cannot adopt rules requiring CMRS providers to provide special interconnection arrangements to switch-based resellers absent an NPRM articulating the basis for its decision.[20] The immediate order sought by the NCRA

---

17 See CSI Petition for Reconsideration, attached as Exhibit 1 to its Comments, citing Specialized Common Carrier Services, 29 FCC2d 850 (1970) (interconnection ordered for specialized common carriers); AT&T, 91 FCC 2d 568 (1982) (ENFIA tariff applies to resellers); and WATS-Related and Other Amendments of Part 69 of the Commission's Rules, 59 RR2d 1418 (1986) (resellers of interexchange services pay the same access charges as facilities-based interexchange carriers.).

18 See, e.g., Report and Order, Cellular Resale Policies, CC Docket No. 91-33, May 14, 1992; Cellular Communication Systems, 86 FCC 2d 469, 511 (1981); Further Reconsideration Order, 90 FCC 2d 571 (1982), appeal dismissed sub nom., U.S. v. FCC, No. 82-1526 (D.C. March 3, 1983).

19 Id. at Para. 13.

20 See BellSouth at 18, fn. 37.

mandating that carriers permit interconnection of reseller switches leaps to a conclusion that the concept of reseller switches serves the public interest. As discussed below, it does not.

B. The Viability of the Reseller Switch Proposal Requires Adoption of Unbundled, Cost-Based Rates

As the filings of both the NCRA and CPUC make clear, the economic viability of a reseller switch requires "unbundled" cellular charges and cost-based pricing.[21] The lower rates promised as a result of a reseller switch are not based on efficiencies realized in the resellers "network" but on receiving "cost-based rates for carrying a call from the mobile unit to the MTSO and from the MTSO to the reseller's switch."[22] In other words, the Commission is being asked to adopt a fundamental paradigm shift away from market pricing of competitive CMRS services to regulated, cost-based, unbundling of network and service elements applied to monopoly utility services.

What the resellers are seeking is a bottoms-up, fully distributed cost allocation scheme, premised upon cellular's alleged "bottleneck" over essential facilities. However, as the Commission has recognized, there is no cellular "bottleneck". As fully discussed by AirTouch and numerous other commentors in this proceeding, the premise of cellular control over bottleneck facilities is contrary to Commission findings and contrary to the market realities.[23] Absent bottleneck facilities or monopoly power, unbundled cost-based

21 "In order to become a competitive alternative, switch-based resellers must be able to isolate charges for monopoly bottleneck services they must acquire from facilities-based carriers from services which they can acquire elsewhere or produce themselves." CPUC at 4. "[Resellers interconnecting switches] will be able to offer rates significantly lower than the carriers' current supracompetitive prices since airtime charges will be unbundled and cost-based." NCRA at 14.

22 NCRA at 14.

23 AirTouch at 6. See also Comcast at 23; AllTel at 3; SWB at 19; RAM Mobile Data at 6-7; OneComm at 10-11; GTE at 2-6, 22-27.

rate-making is contrary to the public interest. Thus the NCRA's reliance on the reasoning of the Commission's Expanded Interconnection Order for LECs is not applicable to CMRS because the Commission has chosen to forbear from requiring and scrutinizing rate submissions.[24]

Attached to these Reply Comments as Appendix 1 is a copy of testimony by Dr. Jerry Hausman submitted in 1991 in the California Public Utilities Commission's investigation into the reseller switch issue.[25] In that pleading, Dr Hausman examines the economic inefficiencies inherent in unbundled, fully distributed cost-based pricing for competitive industries. As demonstrated throughout economic literature, rate-of-return regulation is inefficient for competitive markets, because it results in arbitrary cost allocations, reduces technological innovation, results in less competition, and creates higher prices.[26]

Because each cellular carrier in a market has a unique network, with different costs, cost-based pricing would lead to very different "unbundled" rates between the carriers. This forced rate differential would cause a market shift, resulting in underutilization of one system and overutilization of the other.[27] In essence, unbundled, cost-based rates prevent carriers from responding to market realities, thus reducing the effect of competitive forces.

---

24 NCRA at 18.

25 See CPUC Investigation into the Regulation of Cellular Radiotelephone Utilities, I. 88-11-040, Phase III.

26 Hausman Testimony at 6.

27 Id., at 18.

Economies of scale and scope exist in the cellular network in the provision of such components as call recordation, number administration, billing functions, and enhanced services.[28] Unbundling these components on a fully distributed cost basis destroys those economies, thus increasing the overall cost of service. Market efficiencies are thus lost by the artificial price umbrellas under which the resellers seek to operate, and, in the end, no additional competition results.[29]

Further, unbundle rate elements a carrier must first identify the separate elements and then assign costs to them. Cellular carrier costs are integrated today because the services they provide are integrated through a single network platform. These costs, many of them fixed, include cell sites, radio equipment, buildings, towers, trunks, switch hardware, switch software, and interconnection. Distributing these costs across discrete service elements is inherently arbitrary and adversely impacts both competition and retail prices.

By requiring carriers to offer subsets of services they have never offered before, the Commission would be engaging in micromanagement of the provision wireless services wholly at odds with its articulated policies. Regulation designed simply to benefit resellers does not translate into benefits for consumers. For example, the California Public Utilities Commission is the only state which imposes a retail margin over wholesale prices for the benefit of resellers. Yet, no economic data exist which demonstrate that a larger presence of resellers leads to lower prices or higher quality service for cellular customers. To the contrary, the result of the CPUC's regulatory

---

28 Id. at 4.

29 Id. at 7.

structure is that cellular service prices are higher in California than they would be in the absence of rate regulation.[30]

C. The Reseller Switch Proposal Will Depress Rather than Stimulate Competition

In advocating unbundled, cost-based rates, switched-based resellers seek to share in the earnings of carriers without sharing in the risks. As stated by Nextel, "all of the risk ESMR entrepreneurs are taking in financing and building out advanced mobile communications networks to gain a competitive edge could be canceled out by any other competitor, who could avoid those risks by taking advantage of mandated access to any piece of the ESMR network they desire. It would be inequitable to allow one party to invest millions -- perhaps billions -- of dollars in a system only to have that system used by a third party who has invested no time and no money in the licensing, construction and operation of that system."[31]

Competition in the cellular resale market depends upon the cellular licensee's construction of its facilities.[32] The Commission has repeatedly encouraged carriers to invest in innovative and technologically superior systems.[33] However, mandatory interconnection of reseller switches would do the opposite because it greatly increases the risks faced by cellular carriers and decreases the benefits by allowing competitors to

---

30 See Opposition of AirTouch to CPUC Petition to Rate Regulate California Cellular Service, PR Docket No. 94-105, filed September 19, 1994, Appendix E Affidavit of Professor Jerry A. Hausman at 4.

31 Nextel at 20.

32 Cellular Resale Policies at para. 16.

33 See, e.g., Id., at para. 19.

benefit from the providers' innovations without incurring the risks and by giving third parties an entitlement to cherry-pick facility access.[34]

Providing others with direct unbundled access to internal features of a CMRS network would discourage CMRS licensees from making advanced services available because it would severely limit the ability of carriers to achieve the necessary benefits. The reduced efficiency, uncertainty and resources consumed by regulatory oversight of unbundling proceedings will dampen the incentives to invest in risky technological advancements. Reduced technology investments in turn will lead to slower growth, less product differentiation among carriers and reducte the efficiencies technological breakthroughs create.

Mandatory interconnection of a reseller switch for only one segment of the CMRS market would be also wholly antithetical to the regulatory parity principles mandated by Congress in 1993 and implemented by this Commission.[35] Yet, imposition of unbundled access to PCS networks would create significant new burdens and costs on these already highly risky investments. Potential PCS bidders would have far less incentive to acquire licenses and build-out state-of-the-art networks under a threat that resellers can acquire cost-based access to their network features with none of the risks. Auction revenues would be lower and competition less robust.

---

34 SNET at 14; McCaw at 14.

35 CMRS Second Report and Order, 9 FCC Rcd 1411, 1418 (1994), citing Congressional intent that "similar services be accorded similar regulatory treatment."

D. The Reseller Switch Proposal is Technically Flawed

As AirTouch and others explained in their Comments, the reseller switch concept imposes technical risks to cellular networks which far outweigh the alleged benefits.[36] These risks include problems caused by nonstandardized interfaces and unpredictable shifts in capacity utilization which would lead to more blocked calls.[37] Mandatory interconnection also involves access to proprietary network information that undermines a carrier's incentives to develop technically sophisticated networks in order to gain competitive advantage through differentiated services.

The reseller switch adds no enhanced capabilities for cellular services, but merely adds redundancies and inefficiencies to the network. Additional costs will be incurred for software upgrades, increased processing of call validation functions, additional maintenance and forecasting requirements, new data circuit interfaces, and protocol connectors. These costs are not offset by projected savings in number administration or LEC interconnection, which will simply be transferred directly to the resellers. Other functions including call recordation, bill administration and call routing will not be reduced for the carrier, but merely duplicated on the reseller's switch.[38]

The purported benefits[39] to consumers resulting from interconnection of a reseller switch are either available today through the carriers themselves, or depend upon

---

36 AirTouch at 23-27; GTE at 47

37 AirTouch at 24.

38 In the California proceeding, CSI failed to establish that a reseller switch would relieve the carrier switch of any functions or delay the addition of a switch. See Phase II Post Hearing Memorandum of PacTel Cellular (U-3001-C), CPUC No. I 88-11-040, Nov. 7, 1991.

39 See NCRA at 15.

technical advancements not yet available from equipment manufacturers.[40] Incoming call screening, distinctive call signaling and priority call waiting[41] require SS7 protocols which are not currently available in the industry. When SS7 is available, carriers will offer such services, which require access to the calling party's phone number from the LEC. Carriers do offer limited calling areas, call forwarding and plan to offer voice mail enhancements as soon as vendors complete the required software modifications.[42] The fact is that consumers are likely to experience reduced -- not enhanced -- service quality due to longer call set up times and voice quality degradation due to the extended transmission path.

III. Conclusion

Extension of presubscribed 1+ equal access rules will not serve consumer needs in the highly competitive CMRS market. Unnecessary Commission intervention in commercial transactions between cellular carriers and long distance companies will result in a far greater choice of discounts and service plans in the most efficient manner possible.

Additionally, the public interest will not be served by a policy mandating interconnection of a reseller switch. Such interconnection is economically and technically inefficient. The redundant reseller switch concept proposed in the filings of NCRA and CSI in fact will increase costs to consumers and result in a decrease in service quality. Its viability comes only from the establishment of preferential "unbundled" rates,

---

40 GTE at 47

41 Testimony of Ralph Widmar, submitted to CPUC on August 30, 1991, attached to Exhibit 1 of NCRA Comments.

42 In its testimony before the CPUC, CSI witnesses Midgley and Widmar admitted that a reseller could offer most of the enhanced services CSI proposed without implementation of a switch. CPUC Hearing Transcript, Phase III, NO. I 88-11-040 at pp. 820-822; 879-881; 912-913.

through which inefficient reseller competitors can be maintained. Such artificial pricing, divorced from the demands of the market, will stifle the competitive forces well established in the CMRS market. Mandatory interconnection is an inappropriate regulatory response in a competitive market, where multiple facilities-based carriers compete to provide customers with high quality services at competitive prices.

Respectfully submitted,

Pamela J. Riley

Pamela J. Riley
Director Public Policy

AirTouch Communications
425 Market Street
San Francisco, CA 94596
(415) 658-2058

Kathleen Abernathy
Vice President - Federal Regulatory

David A. Gross
Washington Counsel

AirTouch Communications
1818 N Street, N.W.
Washington, D.C. 20554
(202) 293-3800

October 13, 1994

Before the Public Utilities Commission

of the State of California

Investigation on the Commission's Own Motion into the Regulation of Cellular Radiotelephone Utilities,)	No. I.88-11-040

Testimony of Jerry A. Hausman and Jeffrey Chessher filed in Phase III by PacTel Cellular (U-3001-C) and its Affiliates: Sacramento-Valley Limited Partnership (U-3004-C), Los Angeles SMSA Limited Partnership (U-3003-C), and PacTel Mobile Services (U-4023-C)

PILLSBURY, MADISON & SUTRO
Mary B. Cranston
225 Bush Street
P. O. Box 7880
San Francisco, CA 94120
(415) 983-1621

Roger P. Downes
Vice President and Senior
Counsel
PACTEL CELLULAR
3 Park Plaza
Irvine, CA 92714
(714) 222-7004

Attorneys for PacTel Cellular
and its Affiliates

DIRECT TESTIMONY OF JERRY A. HAUSMAN IN PHASE III OF I.88-11-040

RE: RESELLER SWITCH

1. Q. Please state your name and business address.

A. My name is Jerry A. Hausman. I am Professor of Economics at the Massachusetts Institute of Technology in Cambridge, Massachusetts, 02139. I stated my qualifications and experience in my earlier testimony in this proceeding.

2. Q. Please state the purpose of your testimony.

A. I understand that the issue under consideration in these hearings is whether the reseller switch proposal put forward by Cellular Service, Inc. (CSI) should be accepted by the Commission, and what regulatory and economic principles should be established if such a switch is permitted. In my testimony I discuss the economic principles which should be used to establish a regulatory framework so that economic efficiency is guaranteed while at the same time a level playing field for competition is established. I also consider the issues of technological advancement and the effect on retail cellular prices for consumers. I do not analyze the technical feasibility of the proposed reseller switch, but I concentrate on the economic proposal for the switch put forward by CSI witness Mr. Charles W. King.

<u>ECONOMIC EFFICIENCY CONSIDERATIONS</u>

3. Q. What should the Commission's goal be in evaluating the reseller switch?

A. The overall objective of the Commission should be to enhance efficiency by creating a "level playing field" for competition. Each competitor will have certain possible advantages which it brings to a market. For instance, technologies may differ and cost characteristics may differ among competitors. In my view, a level playing field occurs when each competitor is able to utilize its competitive advantages to the greatest extent possible. The important principle is that competition, and economic efficiency, should be the goal of the level playing field. Individual competitors should neither be favored nor hindered in establishing the conditions for competition.

Two important aspects of economic efficiency are economies of scale and economies of scope, and these economic factors must be considered by the Commission in creating a level playing field :

(1) Economies of scale: I expect that the marginal and incremental costs of the functions provided by a carrier which would be replaced by a reseller switch will be below the average costs of these functions. Thus, as usual in economics in evaluating the expected effect on price of a change in cost, a marginal or incremental approach must be used to ensure economic efficiency. An average cost approach, in contrast, will arbitrarily inflate the carriers' costs to the detriment of consumers. For example, if 25% of a carrier's wholesale customers moved to a reseller's switch, the carrier's cost reduction for the functions avoided by the reseller switch would likely be significantly less than a corresponding 25% of the carrier's costs. To calculate the relevant cost reduction, taking account of economies of scale, the Commission should use either incremental cost in a forward looking manner or avoided cost as described by the Commission in its proposed approach to revision of the USOA. In the above example the correctly computed cost reduction, reflecting incremental or avoided cost, would be less than 25%. As I described in my testimony regarding USOA modifications (Question 9), all changes in costs caused (removed) by the provision of service functions by the reseller switch would be included in the incremental cost of service.

(2) Economies of scope: Costs to provide the services required by the reseller switch will likely be higher than costs to provide similar services to the individual carrier's networks because the economies of joint production will be absent. Cost differences between provision of

a carrier provided cellular service to its own network and provision to a reseller switch must be recognized for economic efficiency to exist.[1]

Adding capacity in today's environment requires the splitting of cells. Economies of scale do not exist in splitting cells. That is, there are not economies of scale in what the resellers call the radio components of cellular service. However, economies of scale do exist in the cellular network for those components similar to the components of the landline network (i.e., call recordation, number administration, billing functions, etc.). Economies of scope also exist for certain features of cellular service such as enhanced services. The parts of the cellular network that the resellers claim they want to replace are the ones that are subject to economies of scale and economies of scope.

4. Q. How can the Commission ensure that economics of scale and scope are taken account of here?

A. Commission policy should make certain these economies of scale and scope are made use of so that economically efficient production occurs, and it should do this by making sure that regulation does not prevent prices from reflecting the economies of scale and economies of scope. In a competitive world the reseller switch would be charged a lower price than the wholesale

---

[1] These cost differences are not a new problem for the Commission since they arise in the same fashion in regulation of LECs. To ensure economic efficiency and a level playing field, the Commission adopted an imputation procedure which recognizes cost difference for a LEC provided service to itself as compared to the LEC service provided to a competitor. The Commission has recognized the importance of cost difference to ensure economic efficiency:

> "However, because of economic efficiency considerations, the local exchange carriers should be allowed to propose that tariffed rates reflect any cost differences between provision of the monopoly function as part of a bundled utility service and provision of that function on an unbundled basis." (Decision 89-10-031, October 17, 1989, p. 141, footnote omitted)

price to ordinary resellers only if the facilities based carrier would experience net cost savings by providing service to a reseller switch. These net savings, if any, should be measured by using avoidable, or incremental, costs. Under no circumstances should prices be kept artificially low to the reseller switch so that a less efficient middleman (the resellers) can cover production costs. Such a price umbrella may allow more retail competitors (but only because of inefficient regulation). However, consumers would be made worse off because prices for cellular service would be higher, all else equal, by such a policy. Instead, customers should receive the competitive benefits of efficient production resulting from economies of scale and scope.

An example from the regulation of long distance carriers demonstrates how consumers can be harmed by a price umbrella. In the mid-1980's long distance resellers attempted to stop regulators from allowing AT&T to lower its prices because they claimed they would be forced out of business given AT&T's economies of scale and scope. Eventually, AT&T did receive permission to lower its prices, and many resellers did go out of businesses. However, competition increased in long distance markets between AT&T, MCI and US Sprint when AT&T lowered its prices and consumers were made better off. A regulatory price umbrella always harms consumers and should be resisted by regulators when companies ask for price protection in the name of increased competition. Price umbrellas lead to <u>decreased</u> competition as well as higher prices.

5. Q. How should the costs differences be estimated correctly for the proposed reseller switch?

A. The first principle to recognize is that carriers already have fully operating cellular networks in place. These networks provide the initial conditions for any calculation of cost differences since carriers made their investments under market ground rules established by the FCC. There are two methods that could be used to measure these cost differences. The first method would be to use an avoided cost approach within a static framework. Given a carrier's current network, how much would its costs be reduced today if a given proportion of its end-users, say 5-10%, migrated to a CSI reseller switch. Note that a given increment of cost savings would be used (not an overall average) and no fully distributed cost (FDC) type allocations would be made for investment in MTSOs because those investments were made with the expectation that the MTSO would service all of the carrier's customers. Thus, only actual avoided costs would be included in the calculation.[2]

A second (and closely related) method is to estimate incremental cost. A growth rate over the next 5-10 years would be chosen for cellular in a given market, and the present discounted cost of meeting this growth would be estimated.[3] A comparison calculation would then be made with a different and lower growth rate (which could be negative) for the carriers' wholesale customers with the remaining customers buying service from the CSI switch. The comparison of this present discounted cost compared with the first estimated cost divided by the number of customers who buy service from the CSI switch would give an estimate of long run incremental costs.

The estimate of avoidable or incremental costs would then be the amount by which the carriers' tariffs would be decreased to reflect the functions provided by the CSI switch.

6. Q. If the difference in wholesale prices charged by a carrier to ordinary resellers (without a switch) and the price charged to resellers with a switch were equal to the carriers' avoidable costs, what implications would that have for the viability of the reseller switch?

A. In my opinion, the financial viability of the reseller switch would be

---

[2] As the avoided cost approach is extended into the future, its will give identical results to the incremental cost approach which I now describe.

[3] Both the growth rate and the future costs are highly uncertain due to the expected change to digital or spread spectrum technology by cellular carriers in the next few years. The dynamic nature of the cellular industry with its attendant risk was discussed in the OII. The CSI proposal causes the cellular carriers to take these risks while the resellers provide the "landline" element of cellular service where the technology is well determined and subject to only minor risks.

open to question. For functions currently provided by the carrier's MTSO, avoidable costs of the carrier are likely to be small (or negative). (See the testimony of Mr. J. Chessher) The reseller switch's costs of providing these same functions is likely to be more costly because of its limited economies of scale and scope. Indeed, as CSI has previously stated, the switch requires cost based regulation to make "economic and competitive sense."[4] Consistent with these previous statements, the CSI proposal asks for a regulated price based on fully distributed costs. Fully distributed costs are the archenemy of economic efficiency which is based on incremental or avoidable cost calculations. As Professor William Baumol, past-president of the American Economics Association, has written:

> "Most economists have long been passionate in their rejection of the full cost pricing criterion. There are many reasons for the strength of our feeling on this matter of which only three will be mentioned here: the arbitrariness of the criterion, the resource misallocation it is likely to produce, and its tendency to undermine the competitive process at the consumer's expense." (W.J. Baumol, <u>Micro theory: Applications and Origins</u>, M.I.T. Press, Cambridge, MA, pp. 151-164)

Thus, the CSI proposal attempts to introduce cost based regulation because, in the view of the CSI, such regulation is required for the switch to make economic sense. Competition should not be subverted at the expense of consumers by cost based regulation so that the CSI switch can exist.

7. Q. Isn't the financial viability of the reseller switch a problem for the resellers, not the Commission, to worry about? Whether the switch survives or not would be determined by the market, would it not?

A. The switch might well not be economically viable if the proper price were charged to the switch. In that case the resellers would seek regulatory

---

[4] "CSI's proposal only makes economic and competitive sense if wholesale cellular carriers are required to unbundle the basic service elements of wholesale cellular service and offer such service elements at cost-based nondiscriminatory tariffed rates to switch-based resellers." (CSI Phase II Opening Comments, p. 1) Please see Appendix A for other similar statements.

relief. They are already doing this through the CSI proposal. The resellers want the price to the reseller switch to be determined by regulation using fully distributed costs where costs caused at wholesale are arbitrarily assigned to a wholesale "landline" customer and where costs caused by the reseller switch are not recovered by the rate for the resellers switch access and usage. This proposal is exactly the same phenomenon that is exhibited by the resellers' proposal for cost allocation for the retail side of the business. The resellers are attempting to create a price umbrella under which to operate. As Professor Baumol has noted:

> "Competitors battle for a high floor under the regulated firm's prices in order to make life easier for themselves. Since the rules of full costing are arbitrary, the results can always be skewed, deliberately or unconsciously, to maximize the competitive handicap imposed upon the regulated firm, and one can generally rely on the complaining competitor to try to do so....But...in protecting inefficient competitors who could not otherwise fend for themselves, the regulators obviously succeed only too well in undermining the competitive process. Customers are forced to pay prices higher than they otherwise would, ostensibly in their own best interests!" (op. cit.)

<u>THE CSI PROPOSAL OF MR. KING IS INCORRECT AND WILL LEAD TO FAILURE OF ECONOMIC EFFICIENCY</u>

8. Q. Does the CSI proposal treat correctly economies of scale and economies of scope?

A. No, the CSI proposal is fundamentally flawed. Mr. King's endorses the use of an average cost approach. The average cost approach is incorrect because it fails to recognize the existence of economies of scale in the very functions the reseller switch is designed to perform, i.e. call verification and recordation, number administration, and billing. The correct approach is either to use incremental cost in a forward looking manner or to use avoided cost. A marginal or incremental approach must be used to ensure economic efficiency. The average cost approach proposed by Mr. King will lead to a loss of economic efficiency and to higher prices for consumers since cellular carriers' costs will not decrease by as much as their revenues because average